

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.(original) A method of reducing the level of saturated fatty acids relative to the level of unsaturated fatty acids in bovine milk by:

(a) determining which cows of a herd produce milk containing β -casein having a proline at position 67, where the herd comprises cows that produce milk containing β -casein having a proline at position 67 and cows that produce milk β -casein having a histidine at position 67, by testing genetic material of individual cows of the herd for the presence of DNA encoding β -casein having a proline residue at position 67 or by testing milk produced by individual cows of the herd (or a product produced from that milk) for the presence of β -casein having a proline at position 67;

(b) selecting cows that have DNA encoding β -casein having a proline residue at position 67 or that produce milk containing β -casein having a proline at position 67; and

(c) milking the selected cows to give milk having a reduced level of saturated fatty acids relative to the level of unsaturated fatty acids compared with milk obtained from the herd.

2.(original) A method as claimed in claim 1 where the β -casein having a proline at position 67 includes one or more of β -caseins A2, A3, D, E and F.

3.(original) A method as claimed in claim 2 where the β -casein having a proline at position 67 is β -casein A2.

4.(original) A method as claimed in claim 1 where the β -casein having a histidine at position 67 includes one or more of β -caseins A1, B, and C.

5.(original) A method as claimed in claim 4 where the β -casein having a histidine at position 67 is β -casein A1.

6.(currently amended) A method as claimed in ~~any one of claims 1 to 5~~ claim 1 where the level of short and medium chain saturated fatty acids having 6 to 14 carbon atoms in each chain (C6:0-C14:0) is reduced compared with milk obtained from the herd.

7.(currently amended) A method as claimed in ~~any one of claims 1 to 6~~ claim 1 where determining which cows of the herd produce milk containing β -casein having a proline at position 67 is by testing genetic material of cows for the presence of DNA encoding β -casein having a proline at position 67.

8.(currently amended) A method as claimed in ~~any one of claims 1 to 7~~ claim 1 where determining which cows of a herd produce milk containing β -casein having a proline at position 67 is by testing the milk produced by cows (or a product produced from that milk) for the presence of β -casein having a proline at position 67.

9.(currently amended) A method as claimed in ~~any one of claims 1 to 8~~ claim 1 where the genetic material of the cows may be any tissue containing, or which contained, nucleated cells.

10.(original) A method as claimed in claim 9 where the genetic material is obtained from blood, hair, or milk.

11.(currently amended) Milk obtained by the method as claimed in ~~any one of claims 1 to 10~~ claim 1.

12.(currently amended) A milk product prepared from milk obtained by the method as claimed in ~~any one of claims 1 to 10~~ claim 1.

13.(original) A method of altering the proportions of saturated fatty acids and unsaturated fatty acids in a food by adding to the food an amount of β -casein having a proline at position 67.

14.(original) A method as claimed in claim 13 where the proportions of saturated fatty acids and unsaturated fatty acids are altered by reducing the level of saturated fatty acids in the food.

15.(currently amended) A method as claimed in claim 13 [[or claim 14]] where the food is milk or a milk product prepared from milk.

16.(currently amended) A method as claimed in ~~any one of claims 13 to 15~~ claim 13 where the β -casein having a proline at position 67 is added to the food by adding milk (or an extract from milk) obtained by the method of any one of claims 1 to 10.